



US01 corrected sequence listing 02\_08\_07.txt  
SEQUENCE LISTING

<110> Wang, Chun  
Xy Li, Benjamin  
Cheng, Xin  
Liu, Jing  
Niu, Li-Wen  
Huang, Wan-Zhi  
Xu, Zhen-Yu  
Luo, Dan  
Kang, Lian-Di  
Ding, Jin-Guo  
Rong, Fang  
Liu, Yan  
Chen, Hui-Ran

<120> Antithrombosis enzyme from the snake venom of Agkistrodon acutus

<130> 54567.8001.US01

<140> 09/938,114  
<141> 2001-08-23

<150> US 60/043,886  
<151> 1997-04-10

<150> US 09/058,740  
<151> 1998-04-10

<160> 13

<170> PatentIn version 3.3

<210> 1  
<211> 544  
<212> DNA  
<213> Agkistrodon acutus

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tttgtgggcc agttgattgc tcagaagata aagtcaagcca aaatccatgt ctggatcgga 180  
ctgagggctc aaaacaaaga aaagcaatgc agcatagagt ggagcgatgg ctccagcatc 240  
agttatgaga attggattga agaagaatcc aaaaagtgtc ttggggtgca catagagaca 300  
gggtttcata agtgggagaa ttttactgt gaacaacaag atcctttgt ctgcgaggca 360  
tagtctgaag atccagctga ttgaagtctg gagaagcaag gaagcccccc accccatccc 420  
ccaaaccctgc ctagccacaa tctctgctat gcacccttg ctcaacggat gctctctgta 480  
gctggatctg gtgttgctgc tcctgatggg ccggaagtca ataaattctg cctagcctga 540  
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<210> 2  
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<212> PRT

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<213> Agkistrodon acutus

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Asp Cys Ser Ser Asp Trp Ser Ser Tyr Glu Gly His Cys Tyr Lys Val  
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Phe Lys Gln Ser Lys Thr Trp Thr Asp Ala Glu Ser Phe Cys Thr Lys  
20 25 30

Gln Val Asn Gly Gly His Leu Val Ser Ile Glu Ser Ser Gly Glu Ala  
35 40 45

Asp Phe Val Gly Gln Leu Ile Ala Gln Lys Ile Lys Ser Ala Lys Ile  
50 55 60

His Val Trp Ile Gly Leu Arg Ala Gln Asn Lys Glu Lys Gln Cys Ser  
65 70 75 80

Ile Glu Trp Ser Asp Gly Ser Ser Ile Ser Lys Glu Asn Trp Ile Glu  
85 90 95

Glu Glu Ser Lys Lys Cys Leu Gly Val His Ile Glu Thr Gly Phe His  
100 105 110

Lys Trp Glu Asn Phe Tyr Cys Glu Gln Gln Asp Pro Phe Val Cys Glu  
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Ala

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Phe Lys Gln Ser Lys Thr Trp Thr Asp Ala Glu Ser Phe  
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<210> 4  
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<212> PRT  
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Asp Cys Pro Ser Glu Trp Ser Ser Tyr Glu Gly Phe Cys Tyr Lys Pro  
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5 US01 corrected sequence listing 02\_08\_07.txt  
10 15

Phe

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<213> Agkistrodon acutus

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Ser Leu Ser Gly Thr Ala Ala  
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Tyr Glu Gly His Cys Tyr  
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<223> Synthetic PCR primer

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<223> Synthetic PCR primer

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ccatggggcg attcatcttc

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<210> 9  
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<223> Synthetic PCR primer

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cagctgcatc ttcagacta

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1 5 10 15

ctc tcc ctg agt gga act gca gct gat tgt ccc tct gag tgg tcc tcc 95  
Leu Ser Leu Ser Gly Thr Ala Ala Asp Cys Pro Ser Glu Trp Ser Ser  
20 25 30

tat gaa ggg cat tgc tac aag ccc ttc gat gaa cct aag acc tgg gca 143  
Tyr Glu Gly His Cys Tyr Lys Pro Phe Asp Glu Pro Lys Thr Trp Ala  
35 40 45

gat gca gag aaa ttc tgc aca caa cac aaa ggc agc cat ctg cct 191  
Asp Ala Glu Lys Phe Cys Thr Gln Gln His Lys Gly Ser His Leu Pro  
50 55 60

ctc aca gca gtg aga gcg att gtg tnn nnn nnn nnt ggt cac gtt gac 239  
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Leu	Thr	Ala	Val	Arg	Ala	Ile	Val	Xaa	Xaa	Xaa	Gly	His	Val	Asp		
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His	Thr	Lys	Leu	Lys	Leu	Ile	Ser	Leu	Ile	Gly	Leu	Lys	Asn	Ile	Trp	
80					85				90				95			
aac	gga	tgc	tac	tgg	aag	tgg	agc	gat	ggc	acc	aag	ctc	gac	tac	aaa	335
Asn	Gly	Cys	Tyr	Trp	Lys	Trp	Ser	Asp	Gly	Thr	Lys	Leu	Asp	Tyr	Lys	
									105				110			
gac	tgg	cgt	gaa	caa	ttt	gaa	tgt	ctc	gta	tcc	agg	aca	gtt	aat	aac	383
Asp	Trp	Arg	Glu	Gln	Phe	Glu	Cys	Leu	Val	Ser	Arg	Thr	Val	Asn	Asn	
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gaa	tgg	cta	agt	atg	gac	tgc	ggc	act	act	tgc	tct	ttc	gtc	tgc	aag	431
Glu	Trp	Leu	Ser	Met	Asp	Cys	Gly	Thr	Thr	Cys	Ser	Phe	Val	Cys	Lys	
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ttc	cag	gca	tagtctgaag	acta												454
Phe	Gln	Ala														
		145														